## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

## NOVEMBER 10, 1993

Dr. F. L. Lambert, Ph.D., P.E. Environmental and Technical Director Westvaco Corporation Chemical Division Box 70848 Charleston Heights, SC 29415-0848

Dear Dr. Lambert,

Thank you for your letter dated December 4, 1991 requesting an interpretation of the Resource Conservation and Recovery Act (RCRA) regulations as they apply to hazardous waste fuels. Specifically, you asked whether overhead from your primary production process which is being marketed as a "fuel enhancer" would be regulated as a "by-product" or a "co-product" under RCRA. I apologize for the long delay in responding to your letter.

According to your letter, the primary production process is still in the development stage and you are delaying further development until you receive an interpretation from EPA on the status of the overhead stream. The determination regarding whether a light hydrocarbon stream generated during production of a primary product would be regulated as solid wastes or as a product under RCRA is a process and substance specific decision. Therefore, we cannot answer your question without further information on your future operation. I have, however, enclosed a letter that we recently sent to the Texas Natural Resource Conservation Commission on similar issues which may be of some help to you. The enclosed letter explains the Office of Solid Waste's existing policy regarding the regulatory status of "clean fuels" and describes our ongoing efforts to address the issues surrounding the reuse of these secondary materials.

Additionally, please note that EPA Regional offices and States authorized to implement the hazardous waste program make determinations regarding the requirements that apply to specific materials and facilities. Some State programs are more stringent than the Federal hazardous waste program. Therefore, you should contact the appropriate Region or State for a determination regarding whether, based on substance and process specific information, individual "process fuels" should be regulated as solid wastes or as products under RCRA.

If you have additional questions or would like more information about our efforts on "clean fuels" please contact Mitch Kidwell of my staff (202) 260-4805.

Sincerely,

Michael J. Petruska Branch Chief Regulatory Development Branch

Enclosure

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

## **NOVEMBER 4, 1993**

Ms. Susan S. Ferguson
Director, Industrial and
Hazardous Waste Division
Texas Natural Resource
Conservation Commission
P.O. Box 13087
1700 North Congress Avenue
Austin, Texas 78711-3087

Dear Ms. Ferguson,

This letter responds to your letter dated November 5, 1992, requesting an interpretation of the Resource Conservation and Recovery Act (RCRA) regulations as they apply to hazardous waste fuels. Specifically, you asked for interpretation and guidance regarding whether fuels containing recovered light hydrocarbon would be regulated as solid wastes or as products under RCRA. I apologize for the long delay in responding to your letter.

Your letter provides examples of three companies that generate light hydrocarbon streams in the production of a primary product and that wish to sell the streams as fuel additives and/or burn them as supplemental fuel in on-site boilers. Your question is whether these secondary materials are RCRA solid wastes.

The determination of whether a secondary material is or is not a solid waste is a complex, largely substance- and situation-specific decision. Therefore, it is difficult to make a general statement regarding the regulatory status of the light hydrocarbon secondary materials referred to in your letter. In essence, the solid waste determination depends on whether the material in question is considered a "by-product" or a "coproduct" of the production process. By-products burned for energy recovery are regulated as solid wastes under RCRA; coproduct fuels (i.e., products) are not. The by-product/co-product determination is based on a number of factors, each of which must be evaluated in a case-specific context.

A by-product is defined in RCRA as "a material that is not one of the primary products of a production process and is not solely or separately produced by the production process" (40 CFR 261.1(c)(3)). The preamble to the 1985 Definition of Solid Waste final rule provides clarification of EPA's intent regarding what constitutes a by-product. It explains that EPA means to include as by-

products, "materials, generally of a residual character, that are not produced intentionally or separately, and that are unfit for end use without substantial processing" (50 FR 625, January 4, 1985).

While there is no explicit regulatory definition of the term co-product, the preamble to the 1985 rule also provides some clarification as to what would be considered a co-product, as distinct from a by-product, under RCRA. The preamble describes co-products as, "materials produced intentionally, and which in their existing state are ordinarily used as commodities in trade by the general public" (50 FR 625, January 4, 1985).

Based on these definitions, several factors must be considered in deciding whether a secondary material is a legitimate product or a waste. They include, for example, whether the material constitutes a separate production stream, whether it is fit for end use essentially as is or must undergo substantial additional processing prior to use, whether it is residual in nature or a highly processed material intentionally produced for sale to the public, whether a legitimate market exists for the material, etc.

Given the information you provided, we agree that at least some of the materials described in your letter may potentially meet the definition of solid waste. If the materials meet the solid waste definition and are further determined to be hazardous under RCRA, they must be burned in compliance with the 40 CFR Part 266 standards for burning of hazardous waste in boilers and industrial furnaces. We recognize, however, that the existing solid waste criteria may be ambiguous and difficult to apply. Furthermore, we are aware that the application of those criteria may inappropriately limit the use of clean alternative fuels. Consequently, the Office of Solid Waste (OSW) is currently evaluating the issues surrounding the regulatory status of "clean fuels" through two separate but related efforts.

First, as you know, the Definition of Solid Waste Task Force has been established to review the overall system by which hazardous wastes are defined and recycling of secondary materials is regulated. The Task Force will submit their recommendations to me on how to improve the regulatory and/or statutory framework for regulating secondary materials in March, 1994. We expect the recommendations to reflect the issues raised by you and other members of the Association of State and Territorial Solid Waste Management Officials subcommittee who have participated in the Round Table process.

Second, for the past several months, EPA has been developing a "Hazardous Waste Combustion and Waste Minimization strategy," to reduce the amount of hazardous waste produced and strengthen the controls on hazardous waste combustors (incinerators, boilers and industrial furnaces). Through this effort, EPA is reexamining its existing regulations and policies on waste combustion in order to develop an integrated program for source reduction and waste management. For further information on the combustion portion of the strategy, you can contact Fred Chanania at (703) 308-8420.

Both of these efforts provide forums through which we hope to address the "clean fuels" issue (e.g., identifying "clean" fuel not subject to RCRA) in the context of the overall program. In the meantime, if you have additional questions or need further information on this issue, please contact Mitch Kidwell of my staff at (202) 260-8551.

Sincerely,

Bruce R. Weddle
Acting Director
Office of Solid Waste